Cornerstone ADVISORS

Capitalizing on Embedded Finance and Fintech **Opportunities**

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Heading into 2023, the banking industry is going gaga over embedded finance (which Cornerstone Advisors defines as "the integration of financial services into non-financial websites, mobile apps, and business processes"). Consultants are heralding this new form of financial product distribution as a disruptive force, with Bain Capital estimating that, by 2026, embedded finance transactions will reach $7 trillion in value and account for 10% of all financial transactions in the U.S.[1]

Since financial services still need to be provided by licensed financial institutions, this is as much as an opportunity for banks and credit unions as it is a threat. Financial institutions' involvement in embedded finance is called "banking as a service" (BaaS), which we define as:

> A strategy where a financial institution partners with a fintech or other non-financial institution (i.e., brand) to provide financial services to the partner's customer base, leveraging the financial institution's charter and capabilities like account management, compliance, fraud management, and payment and/or lending services.

For all the discussion and confusion surrounding the concept, BaaS really comes down to being a distribution channel play. According to consultancy Oliver Wyman:

> "For a bank, BaaS is an opportunity to reach a greater number of customers at a lower cost. The typical customer acquisition cost is in the range of $100 to $200. With BaaS, the cost can range between $5 and $35. For the distributor, offering financial products opens up new revenue lines at attractive margins and can deepen its relationships with customers, and can then capitalize on cross-selling opportunities."[2]

Providing BaaS-related services enables banks to disaggregate the sources of revenue, and although they may have to share interchange revenue with the sponsoring brand (and third-party platform provider, if they use one), many of the banks pursuing or planning to launch a BaaS strategy see opportunities to generate fees from ACH, fraud management, know your customer (KYC), account verification, and card issuing and processing services.

By 2026, 300 banks in the U.S. will be providing BaaS services, generating $25 billion in revenue. An individual bank serving one million consumers and 300,000 commercial accounts could generate roughly $41 million in annual non-interest income, $17 million from consumer accounts and $24 million from commercial accounts.[3]

Why do we believe there will be so much demand for embedded finance? Cornerstone Advisors surveyed U.S. consumers about their use of, and interest in, embedded financial products and services from their favorite non-finance brands. The results confirm the demand.

- Three-quarters of gamers are interested in an in-game account where they could deposit money and use it to buy and sell virtual in-game items and collect rewards for game achievements/progress.

- Two-thirds of home fitness fans expressed interest in getting health insurance from home fitness providers with rates based on their personal fitness habits.
- Nearly two-thirds of fashion aficionados would consider getting an investment account from a luxury brand that allowed them to easily invest in that company's stock.
- Six in 10 car buffs would investigate auto insurance—with rates based on their personal driving history and behavior—directly from a car manufacturer.
- Half of home improvement do-it-yourselfers are interested in a savings account that automatically sets aside money to save for large home improvement projects from companies like Home Depot or Lowe's.

Among consumers who said they didn't want financial products from a non-financial brand, only half said it was because they prefer to get financial products from a bank. The more prevalent reason was concern that it would be difficult or inconvenient to manage the product—a concern that good delivery and execution can overcome.

The impact of embedded finance goes beyond the revenue generated by the financial product, however. Among consumers who already get a financial product from a non-financial brand, a third said the product caused them to spend more money with the brand, three in 10 said they now choose the brand over its competitors more often, and a little more than a quarter feel more loyal to the brand.

The bottom-line result of brands providing financial products to consumers is a **flywheel** effect—the financial products not only generate revenue in and of themselves, but they lead to consumers spending more money on the brand's products and services than they had before obtaining the financial product.

The Embedded Fintech Imperative

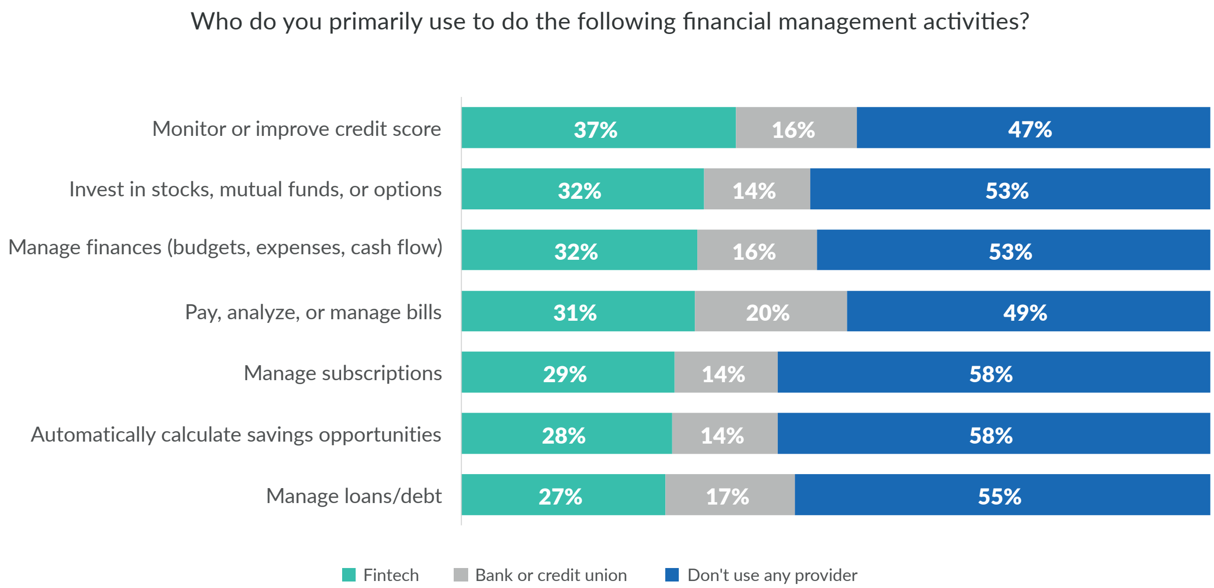
If just 300 banks are providing BaaS services in 2026, what will the rest of the institutions be doing? The answer is **embedded fintech**, which Cornerstone defines as:

> The integration of fintech products and services into a financial institution's product sets, websites, mobile applications, and business processes.

In essence, embedded fintech is the flip side of embedded finance. Both strategies are all about distribution—embedded finance about distributing financial products through non-financial institution providers, and embedded fintech about distributing products and services from non-financial institution providers (like fintech) through banks and credit unions.

Across a range of financial management services, the percentage of consumers using fintech providers exceeds the percentage using traditional banks and credit unions (Figure 1). And across the seven services, an average of roughly four in 10 consumers using a fintech pay to receive or access the service.

Figure 1: Choice of Providers for Financial Management Services



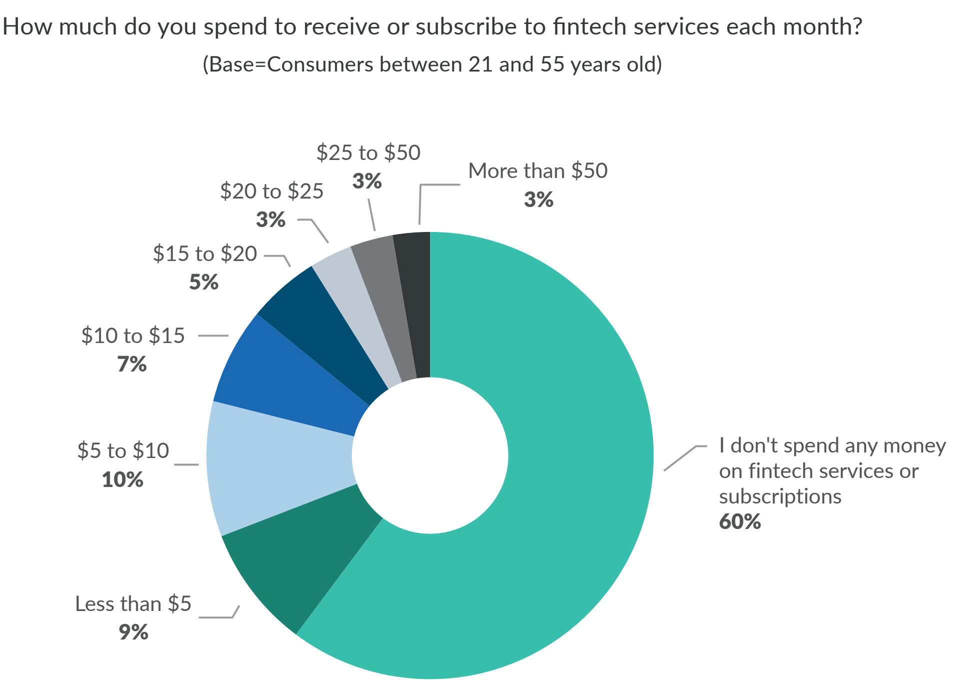
Source: Cornerstone Advisors survey of 3,030 U.S. consumers, Q1 2022

This shouldn't come as a surprise. In his 2020 Letter to Shareholders, JPMorgan Chase CEO Jamie Dimon wrote:

> "Fintech companies are making great strides in building both digital and physical banking products and services. From loans to payment systems to investing, they have done a great job in developing easy-to-use, intuitive, fast, and smart products. We have spoken about this for years, but this competition now is everywhere. Fintech's ability to merge social media, use data smartly and integrate with other platforms rapidly (often without the disadvantages of being an actual bank) will help these companies win significant market share."

Fintechs' fees are often positioned as subscription charges. Acorns, for example, bundles its products into subscription tiers. Dave (a fintech, not the name of some random guy) charges a monthly "membership" fee to access the company's account monitoring, notification services, and budgeting. Across the industry, the subscription charges and membership fees add up. Among consumers between the ages of 21 and 55, 40% pay to receive or subscribe to fintech services each month, with half spending $10 or more (Figure 2).

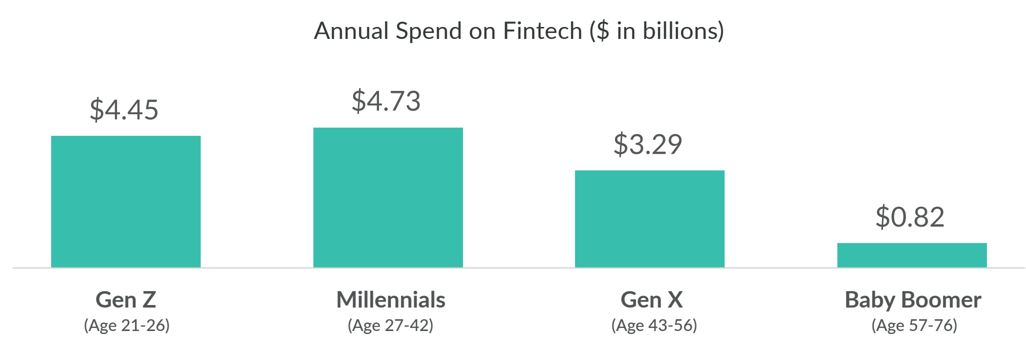
Figure 2: Monthly Spend for Fintech Services



Source: Cornerstone Advisors survey of 3,030 U.S. consumers, Q1 2022

Overall, 47% percent of Gen Zers and 44% of Millennials pay for fintech services each month. Gen Zers' and Millennials' average monthly spend on fintech exceeds $6 per month, with Gen Xers averaging close to $5 per month. On an annual basis, that comes out to $4.45 billion of spending from Gen Zers, $4.73 billion from Millennials, and Gen Xers spending $3.29 billion. All told, fintechs generate $13.3 billion in annual revenue from fees and subscription charges (Figure 3).

Figure 3: Annual Spend for Fintech Services by Generation

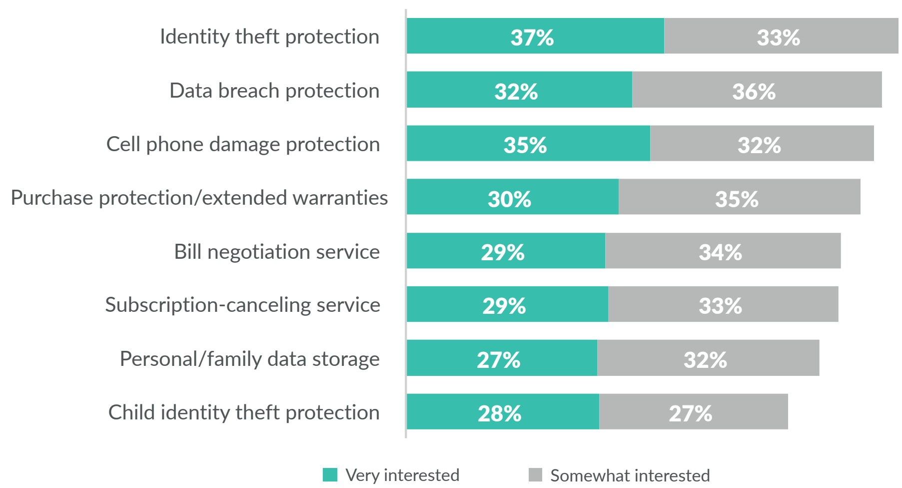


Source: Cornerstone Advisors survey of 3,030 U.S. consumers, Q1 2022

Fintechs don't necessarily have this business locked up. Across a range of fintech and financial management services, many consumers express an interest in getting those services from a bank or credit union, bundled with their checking account, knowing there may be a fee associated with the service (Figure 4).

Figure 4: Demand for Fintech and Financial Management Services Bundled with a Checking Account

How interested are you in getting fintech and financial management services bundled with a checking account?
(A monthly fee, dependent on the number of services you chose, could apply)



Source: Cornerstone Advisors survey of 3,030 U.S. consumers, Q1 2022

In practice, we don't anticipate that financial institutions will price (and charge for) each value-added service individually, instead opting to create bundled packages or pricing tiers like many fintechs do. To estimate the revenue potential from an embedded fintech strategy, Cornerstone built a model that assumes:

- Financial institutions will create two subscription tiers: Tier 1 with six to eight bundled fintech services, and Tier 2 with three to four services, priced at $10 and $5 per month, respectively. The baseline checking account growth rate will increase based on the improved attractiveness of the account offering.

- A percentage of accounts will be exempt from a monthly fee based on the scope of their relationship (i.e., number of accounts, balances, spending levels). This percentage will grow over time, which depresses the subscription revenue but produces revenue for other lines of business in the institution. These indirect revenue benefits are not captured in the model.

- Financial institutions will share 50% of the revenue with fintech partners and 10% of the subscription total with a partner that manages the program.

Based on the assumptions above, a financial institution with a starting base of 250,000 checking accounts could generate more than $1.8 million in incremental revenue for a gross profit of almost $750,000 in the first year. With embedded fintech adoption growing to 50% of checking accounts by the fifth year, total subscription revenue will grow to more than $15 million in that year, with a net revenue of more than $6 million (Table A).

Table A: Embedded Fintech Revenue Model

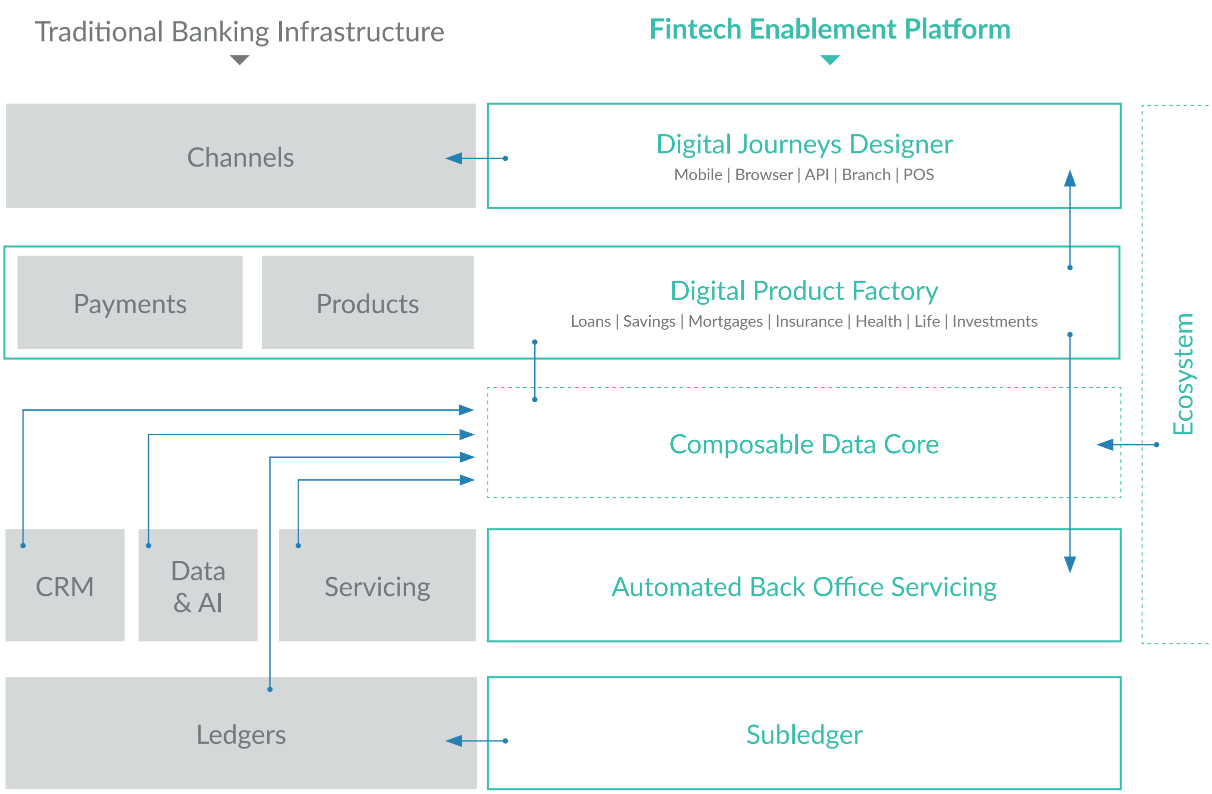
	Year 1	Year 2	Year 3	Year 4	Year 5
Number of checking accounts	250,000	262,500	288,750	324,844	373,570
Annual checking account growth rate		5%	10%	13%	15%
Tier 1 adoption rate	2.5%	5%	10%	15%	20%
Tier 2 adoption rate	7.5%	10%	15%	20%	30%
% of accounts exempted from fee	10%	12%	14%	16%	18%
Monthly pricing Tier 1	$10	$10	$10	$10	$10
Monthly pricing Tier 2	$5	$5	$5	$5	$5
Revenue share percentage	50%	50%	50%	50%	50%
Program management percentage	10%	10%	10%	10%	10%
Annual Tier 1 revenue	$743,750	$1,559,250	$3,424,575	$5,769,225	$8,831,202
Annual Tier 2 revenue	$1,115,625	$1,559,250	$2,568,431	$3,846,150	$6,623,402
TOTAL ANNUAL REVENUE	**$1,859,375**	**$3,118,500**	**$5,993,006**	**$9,615,375**	**$15,454,604**
NET ANNUAL REVENUE	**$743,750**	**$1,247,400**	**$2,397,203**	**$3,846,150**	**$6,181,842**

Source: Cornerstone Advisors

The Fintech Enablement Platform

Pursuing an embedded finance or fintech strategy requires most financial institutions to deploy new technology infrastructure, specifically, a **fintech enablement platform** that acts as a central nervous system for digital financial products and services. A fintech enablement platform helps reduce complexity and accelerate the launch, servicing, and expansion of financial solutions (Figure 5).

Figure 5: Fintech Enablement Platform



Source: FintechOS

Fintech enablement platforms include prebuilt and modifiable: 1) product definitions and servicing capabilities, 2) data models that sit on top of existing data sources, 3) customer journeys that make use of embedded automation, 4) SaaS ecosystem connectors that are orchestrated in customer journeys and bring external innovation into the mix, and 5) maker tools that allow non-technical resources to create, service, and update solutions.

Why Do Banks Need a New Platform?

Any bank chief information officer going in front of the board to ask for approval to fund a fintech enablement platform—or any integration or middleware layer—is bound to get asked what the return on the investment is going to be.

We don't care what any consultant or vendor tells you—the ROI is incalculable. It's impossible to calculate because it's impossible to know what projects or initiatives might be created, funded, and deployed that will utilize the platform to achieve their potential impacts.

The key to justifying the new platform is demonstrating the extra cost and time that future projects and initiatives the organization will incur without the benefit of a fintech enablement platform. Financial institutions need to marry two imperatives—the need to innovate and the need to modernize.

Banks don't need to be convinced of the need to innovate, and many—if not most—have come to understand the need to modernize their technology stack (i.e., to something scalable, cost-effective, and cloud-native). The challenge is "how do we get there from here?" Banks don't have the luxury to wait two to four years to replace a core system and put innovation programs on hold over that time frame.

The fintech enablement platform is the mechanism by which banks can continue to innovate and enable a progressive core modernization by creating product catalogs, automating servicing processes, and creating and deploying APIs for better data management and integration. From an innovation perspective, a fintech enablement platform helps banks simplify and accelerate customer journeys related to:

- **Embedded lending.** For example, with a fintech enablement platform, banks can embed point of sale lending capabilities into a medical practice management system to provide financing for medical procedures not normally covered by insurance with real-time approval of financing. At one bank, a fintech enablement platform helped to create a dealer portal for an agricultural machinery manufacturer that automated credit checks with Experian and digital signatures with DocuSign, provided flexible credit decisioning on dealer loans, and integrated with the bank's core system.

- **Digital account opening.** Having a more efficient onboarding process is a critical differentiator for banks. It drives opportunities to manage cash and liquidity more efficiently, reduce processing costs, and add overlay services that improve the customer experience. A fintech enablement platform with no-code/low-code tools can enable banks to streamline the entire process and, in some cases, remove the need for the specialized IT resources typically required for integration between the bank and corporate customer. The fintech enablement platform serves as an integration point for both parties, eliminating the back-and-forth that typically takes place.

- **Small business lending.** Uncertainty and delayed time to funding are pain points for small businesses in the borrowing journey. A fintech enablement platform can make data available across bank functions, including sales, marketing, and pricing. As McKinsey wrote: "Capturing real-time credit insights from transactions and sales enables banks to significantly enhance the performance of their credit models. Establishing a modular framework for SME credit models also enables banks to build predictive models sequentially with expanding data."[4]

Realizing the Opportunities of the Embedded Future

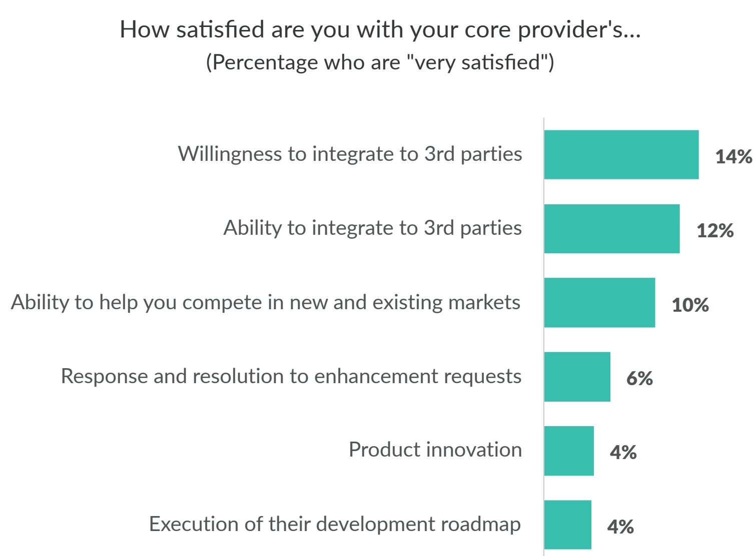
Bank and credit union executives who think they can send some of their staff out into fintech land, identify a few potential partners, and put those firms' products and services up for sale on their websites and mobile apps are deceiving themselves. Through interviews with execs at leading financial institutions going down the embedded finance and fintech paths, we've identified practices and competencies that financial institutions need to deploy, develop, and build to capitalize on the embedded future opportunity.

We've categorized these new practices and competencies into three groups: 1) new core workaround strategies, 2) new product development, and 3) new skills and organizational structures.

New Core Workaround Strategies

The core system is a sore topic for many bank and credit union executives, and satisfaction with core providers' willingness and ability to integrate to third parties is anemic (Figure 6).

Figure 6: Core Provider Satisfaction



Source: Cornerstone Advisors survey of 300 community-based financial institution executives, Q4 2022

As one financial institution executive commented:

> "The future is not monolithic platforms the Big 3 continue to shove down our throats. The shift towards the cloud and open APIs is inevitable. We need core solutions with fully documented and open REST APIs without needing to spend an additional seven figures on platforms like MuleSoft. We also need core vendors willing to put together their own low-code/no-code software factories so we can easily extend the core."

The upshot is that many institutions must develop and deploy core workaround strategies and solutions. Finding core systems workarounds isn't new. According to Cornerstone Advisors Partner Quintin Sykes:

> "There are banks and credit unions comfortable with integration with best-of-breed solutions that pursue this strategy. I call it 'turning the core into a glorified adding machine.' It's a viable approach for institutions good at—and comfortable with—integration and managing a lot of vendors."

One such bank is $30 billion (assets) First Bank in Colorado. The bank has a strong technology presence with more than 400 people in the IT department. Ten years ago, First Bank had a strong bias towards building everything but, looking at the proliferation of technology, realized that wasn't sustainable and started taking an API-focused approach. According to the bank's CEO, James Reuter:

> "The bank's mobile banking platform is built as a separate system with API calls to all the other systems so that if someday it wants to replace the core or mobile banking it can buy something it can plug and play. The bank is committed to being the best at integrations, which it believes is a better strategy than being the best at building your own thing. Because we took a plug and play approach and didn't bet the farm on any one part of our technology stack, we're able to bring in best of breed. I never feel like anything holds us back other than our ability to integrate. And I know if your core is purchased, sometimes that can be more difficult. API plug and play has really given us some flexibility not available to all of our competitors."

Successfully working around the core requires two things according to Jay Tkachuk, chief digital officer at $19 billion (assets) Golden 1 Credit Union:

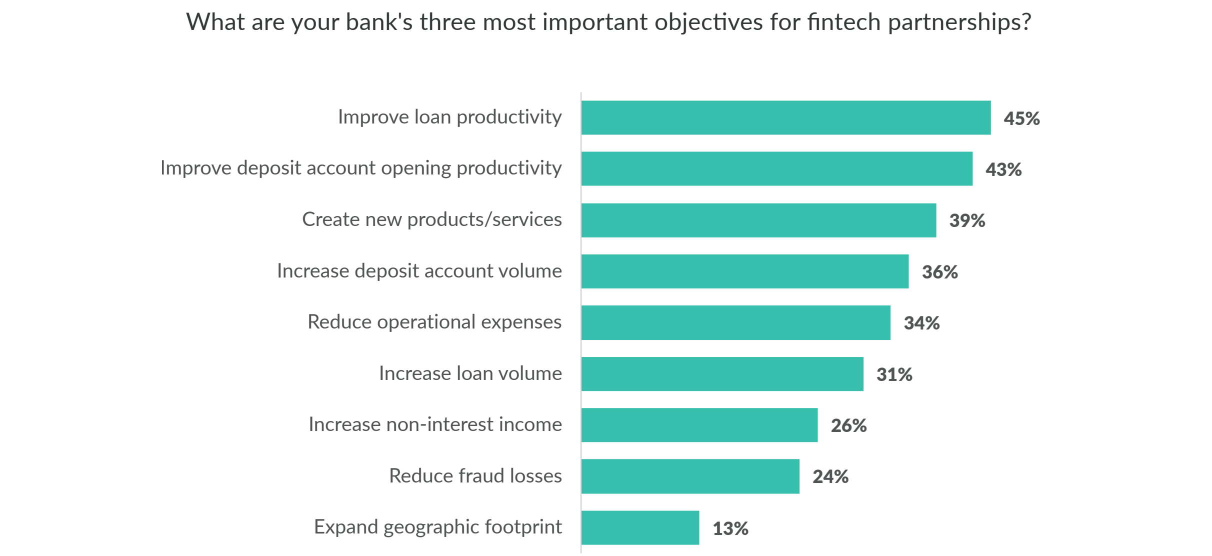
> "First, it's transforming the architecture itself. A lot of financial institutions' architecture is monolithic, powered by legacy vendors or legacy solutions. They need to be gradually converted to microservices type architectures that support experimentation in innovation, even incremental ones. The second thing is with middleware. Financial institutions need to find ways to abstract their older core from the modern solutions. Whatever middleware layer a financial institution chooses, it has to have the capabilities that will allow the institution to iterate and not have to run full regression testing on everything it does."

Unlike a middleware layer, which still turns to the old and tired legacy systems for backend processing, a core workaround approach offloads workload from the legacy core. Processing payments and deposits outside the legacy core saves banks from having to pay for each statement, account, card, and other bells and whistles. With reduced dependency on the core providers for innovation, banks can offer APIs to talk to other vendor applications, BaaS APIs to fintech partners, and virtual/FBO accounts, operated outside the core.

New Product Development

Creating new products and services is one of banks' most important objectives of their fintech partnership efforts (Figure 7). But capitalizing on the embedded fintech opportunity isn't as easy as just putting other firms' products up for sale. It requires financial institutions to integrate third-party products, services, and solutions into their own product offerings. For many institutions, this will require the creation of a new competency around new product development.

Figure 7: Fintech Partnership Objectives



Source: Cornerstone Advisors survey of 300 community-based financial institution executives, Q4 2022

One bank that has done this is $25 billion (assets) Simmons Bank. According to the bank's chief digital officer, Alex Carriles:

> "With the introduction of our 'Coin Checking Account,' Simmons Bank rethought the concept of a checking account and streamlined the process for opening it. The account opening process starts by scanning a QR code on a mobile phone. The bank requires three pieces of information—social security number, phone number, and email address. Everything else the bank picks up from the applicant's driver's license and asks for a selfie to ensure the applicant is a real person (and to match the picture to the license).
>
> "In addition, the bank has eliminated the funding process. It's not like the bank asks applicants if they want to skip it and go with zero as a funding amount. Instead, there is no funding step in the account opening process. The bank has found that new customers figure out how to put money in the account at some point, whether it's the next day, the next week, or the next month.

> “The key to deploying the new product and process was a new platform. The first product the bank launched—Coin Checking—took nearly a year to get the infrastructure in place, with all of the required microservices. Once the platform was in place, however, the bank was able to launch a corresponding savings account in about six months. Currently, the bank is working on a third product built on the new platform that will launch within 60 days of development.”

Beyond new product development skills, banks and credit unions need new approaches to new product decision-making. Historically, proposals for new products and services need to meet high ROI and revenue hurdles at many banks. The process leads banks to go after the “home run”—that one big product that will attract hundreds of thousands (if not millions) of customers.

What banks need is a decision-making and investing process that funds a lot of “singles”—products that will attract thousands (possibly tens of thousands) of customers. In the past, this wasn’t feasible because of the high fixed costs associated with new product deployment.

New Skills and Organizational Structures

Many financial institutions overlook the people side of the equation when pursuing an embedded fintech strategy. The people side encompasses two things: upskilling/reskilling the workforce and creating new organizational roles and units.

Liberty Bank, a $7.4 billion (assets) bank in Connecticut, deployed a new layer to integrate more seamlessly with fintechs so it can have real-time connections with its core applications. But according to Hope Utterbeck, the bank’s chief information officer:

> “From an organizational perspective, Liberty had to do two things. The first was to bring on board an enterprise architect to put a strategy together around the integration layer and understand: Is it needed? Are we going to be able to invest in it? What benefits will it deliver (e.g., reusability)? The second was putting in the right staffing model from an operating model, support, and growth standpoint. The bank determined it had to add to staff to be able to look at some of the skill sets that it didn't have in house so it could integrate and support new tools into its portfolio.”

The upskilling/reskilling imperative doesn’t apply to just the technical staff, however. Carey Price, senior vice president of digital strategy and delivery at $6 billion (assets) BCU, told us:

> “Upskilling—for both digital delivery and human interaction—has become a top priority for the banking industry. When we talk about upskilling, we're looking at a change management mindset. How do we upskill the staff to adopt some of these things faster? But if the organization can't take it, then we're doing a bad job at supporting it when people do have a question. That's been really important to us. We want to make sure that our change management is lockstep with agile transformation.”

From an organizational perspective, fintech partnerships are a new strategic competency for banks and credit unions.

Financial institutions can't capitalize on the embedded fintech opportunity with the existing organization structure—they need a group dedicated to fintech partnerships. According to Cornerstone's research, financial institutions in the $1 billion to $10 billion asset range have, on average, two full-time equivalent employees dedicated to fintech partnerships. That's not going to cut it. Banks and credit unions need:

- **Dedicated fintech partnership teams.** Organizationally, banks and credit unions committed to growing through fintech partnerships need: 1) a centralized team that can identify, vet, and negotiate with potential partnerships, and that can determine the technical integration requirements; and 2) decentralized fintech partnership personnel who report into the lines of business that own the partnership relationship and accountability for business results. These new teams need to develop partnership due diligence evaluation processes and a fintech partnership portfolio strategy.

- **A chief revenue officer.** In addition, community-based financial institutions should evaluate the need to create a chief revenue officer position. The purpose of this role would be to: 1) create and instill a new product design and development process, 2) focus on creating a sales process for non-lending products and services, and 3) be accountable for non-lending (but not just non-interest) income in the institution.

Conclusions

While many banking industry observers see recent embedded finance trends as a threat to incumbent financial institutions, there is a huge opportunity in the market for banks and credit unions—particularly those in the mid-size asset range—to establish new sources of revenue and drive new growth through an embedded fintech strategy.

Cornerstone Advisors estimates that a mid-size financial institution with 250,000 checking account holders could generate an additional $15 million in annual non-interest income from an embedded fintech strategy and—just as importantly, if not more so—drive greater customer or member engagement and loyalty.

Capitalizing on the embedded fintech opportunity requires a lot of changes from a financial institution. Many bank and credit union executives see their core system and technology infrastructure as the big barrier to pursuing an embedded fintech strategy.

They might be misguided, however.

With the emergence of fintech enablement platforms, a technology solution to overcoming the limitations of the core and tech infrastructure is at hand. To fully capitalize on the embedded fintech opportunity will require senior executives at mid-size financial institutions to focus on core workaround strategies, new product design and development, new organizational skills and structures, and new technology experimentation.

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Cornerstone Advisors Chief Research Officer Ron Shevlin heads up the firm's fintech research efforts and authors many of its studies. He has been a management consultant for more than three decades, working with leading financial services, consumer products, retail, and manufacturing firms worldwide. Prior to joining Cornerstone, Shevlin was a researcher and consultant for Aite Group, Forrester Research, and KPMG. Author of the Fintech Snark Tank blog on Forbes, Shevlin is ranked among the top fintech influencers globally and is a frequent keynote speaker at banking and fintech industry events.

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About Cornerstone Advisors

After more than two decades in this business, Cornerstone Advisors knows the financial services industry inside and out. We know that when banks and credit unions improve their strategies, technologies, and operations, improved financial performance naturally follows. We live by the philosophy that you can't improve what you don't measure. With laser-focused measurement, financial institutions can develop more meaningful business strategies, make smarter technology decisions, and strategically reengineer critical processes.

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About FintechOS

FintechOS is the global leader in fintech enablement, with a mission to make fintech innovation available to every company. The FintechOS platform simplifies and accelerates the launching, servicing, and expansion of financial products and services, helping businesses recognize value up to 5 to 10 times sooner than with other approaches: with FintechOS, companies can get up and running with new financial solutions in as little as 12 weeks.

Unlike others, FintechOS breaks data free from the core, enabling the creation of personalized and differentiated products and customer journeys at scale. FintechOS connects with any ecosystem tech or service—financial and nonfinancial—and can plug anywhere in the tech stack, working with existing and legacy tech that companies want to keep.

A global employer co-headquartered in London and New York, FintechOS customers range from globally strategic companies like Groupe Société Générale, Admiral Group, and BPCE Oney, to game-changing players like Vibrant, eMag, and Howden. Its partners include both niche consulting agencies and global consulting firms and systems integrators, including Deloitte, EY, and PWC.

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Endnotes

[1] www.bain.com/about/media-center/press-releases/2022/embedded-finance-transaction-value-to-more-than-double-to-$7-trillion-in-us-by-2026-but-financial-institutions-must-move-quickly-to-keep-upbain--company-and-bain-capital-report/

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